

TIER 2 GENERAL PERMIT TO DISCHARGE STORM WATER ASSOCIATED WITH INDUSTRIAL ACTIVITY

Fact Sheet

WPDES Permit No. WI-S067857-2

September 2005

SUMMARY

Facilities engaged in the "industrial" activities listed in s. NR 216.21(2)(b), Wis. Adm. Code, must apply for and obtain a storm water discharge permit. This permit requires permittees to develop and follow a storm water pollution prevention plan. The plan must be prepared in accordance with plan requirements contained in s. NR 216.27, Wis. Adm. Code, including provisions for site mapping, implementation schedules, annual plan assessments, and both non-storm water and storm water discharge monitoring. This fact sheet provides information regarding the Tier 2 general permit for the discharge of storm water associated with industrial activity.

INTRODUCTION

DNR's Authority to Issue Permits

The Federal Water Pollution Control Act of 1972 (Public Law 92-500), also called the Clean Water Act, requires that all point sources discharging pollutants to waters of the state obtain a wastewater discharge permit. These permits specify the conditions under which wastewaters can be discharged so that water quality standards for receiving waters are met. In 1974, the United States Environmental Protection Agency (USEPA) delegated the authority for issuing these permits to the Wisconsin Department of Natural Resources (DNR). The DNR exercises its permitting authority through the Wisconsin Pollutant Discharge Elimination System (WPDES), authorized under ch. 283, Wis. Stats. Wastewater permits issued by the state are also federal permits, and must meet with the approval of the USEPA.

The State of Wisconsin has the authority to issue two types of permits for the discharge of pollutants to waters of the state: 1) individual WPDES permits and 2) general WPDES permits. The DNR issues individual WPDES permits when the interaction between pollutant discharges and water quality is complex. These permits require careful scrutiny and must be tailored to the specific conditions of the discharge site. Currently, the State of Wisconsin has issued about 900 specific WPDES permits for the discharge of industrial wastewater. The DNR issues general WPDES permits to a broad classes of dischargers where environmental protection can be achieved through a set of general provisions that apply to all dischargers in an industrial category. The state currently has about 20 general permits that cover discharges from over 4000 industrial facilities.

DNR's Existing Efforts to Control Industrial Storm Water Discharges

The DNR has been using its regulatory authority in several program areas to control selected discharges of contaminated storm water. For example, the DNR has been requiring some type of storm water controls through its landfill licensing, hazardous waste licensing, and metallic mine licensing activities. The DNR has also had authority through federally promulgated effluent limitations to regulate storm water discharge quality for eight categories of industry in Wisconsin (cement manufacturing, feedlots, petroleum refining, phosphate manufacturing, steam electric, coal mining, ore mining and dressing, and mineral mining and processing). Some of these limitations are imposed through general permits, and some are imposed through individual WPDES permits. In addition, the DNR has also been regulating the discharge of storm water contaminated with petroleum products through other WPDES permits.

Current Storm Water Permit Program for Industries

In 1987, Congress enacted amendments to the Clean Water Act (PL 92-500) authorizing a national program of comprehensive storm water pollution control for industries and municipalities. The class of storm water

discharges "associated with industrial activity" was identified as a high priority for permitting. Through a series of rule making authorized by the 1987 amendments (40 C.F.R. Part 122.26), the USEPA has:

- 1 identified in final rules an extensive list of industries requiring a permit to discharge storm water, and set forth permit application requirements for industry (November 16, 1990);
- 2 set forth in final rules the NPDES General Permit for industrial storm water discharges in non-delegated states (September 9, 1992); and
- 3 set forth in final rules notification requirements for industries seeking coverage under general permits, and set forth minimum monitoring and reporting requirements for storm water discharges associated with industrial activity (April 2, 1992).

Although the federal general storm water permit is not directly applicable to Wisconsin, provisions of the permit are being considered as Best Available Technology (BAT) and Best Conventional Technology (BCT) for storm water management. Since the Clean Water Act amendments require that storm water discharges meet BAT/BCT, the federal permit had important implications for states like Wisconsin as they developed their own rules concerning storm water permitting.

Concurrent with the USEPA's actions, the Wisconsin DNR has been conducting storm water program activities associated with this new program. Between April and September 1991, DNR mailed permit applications (WPDES Forms 3400-151 & 3400-152) to approximately 20,000 industrial facilities in the state that could potentially be affected by the new storm water regulations. Individual applicants were given until November 18, 1991 to submit completed applications to the DNR. Alternatively, dischargers could opt to join together with other like industries and submit a "group" application to USEPA in Washington, D.C. Under the group application system, information was to be submitted to USEPA in two parts. Due dates varied under the federal program from October 1, 1992, to May 17, 1993, depending upon industrial type. All storm water dischargers submitting either DNR's application form or that were included as a member of a group application approved by USEPA will be considered by the DNR for general permit coverage.

In 1993, ch. 147 (now ch. 283), Wis. Stats., was amended to include storm water as a "point source" discharge and to require DNR to promulgate administrative rules for permitting the discharge of storm water. As a result, DNR created ch. NR 216, Wis. Adm. Code, for permitting storm water discharges associated with industrial activity, construction sites 5 acres or larger [now one acre or larger], and selected municipalities. These rules contain a specific directive for DNR to create a minimum of three tiers of general permits for the discharge of storm water associated with industrial activity. The Tier 1 general permit will cover the industrial activity listed in s. NR 216.21(2)(a), Wis. Adm. Code, including a variety of "heavy" type industries, bulk storage facilities, and facilities engaged in salvage type operations. The Tier 2 general permit will cover the industrial activity listed in s. NR 216.21(2)(b), Wis. Adm. Code, including a variety of "light" industries, certain transportation facilities, mining operations, steam electric generating facilities, cement manufacturers, and asphalt pavers. Under these administrative rules, DNR may allow permittees to change coverage from one tier general permit to another, depending upon conditions present at the facility that could contaminate storm water. Ultimately, if a permittee can demonstrate that storm water at their facility could not be exposed to any industrial activity listed in s. NR 216.27(3)(i), Wis. Adm. Code, a facility can certify to a condition of "no exposure" for storm water discharge.

WISCONSIN'S TIER 2 GENERAL STORM WATER PERMIT

Purpose and Nature of the Tier 2 General Permit

Ch. NR 216, Wis. Adm. Code, defines the conditions under which storm water associated with industrial activity can be discharged so that waters of the state (including surface waters, ground water, and wetlands) will be protected. This storm water permit is intended to meet the permitting requirements for storm water associated with industrial activity as established in ch. NR 216, Wis. Adm. Code, for a Tier 2 general permit.

This permit will be issued by DNR, and subsequently used to cover eligible industries. The permit will become effective at a facility beginning upon the Start Date specified by DNR in a cover letter to the facility as required by s. NR 216.26(4), Wis. Adm. Code. In summary, this permit requires regulated industrial facilities to:

- 1 Identify and eliminate unpermitted non-storm discharges from storm water outfalls;
- 2 Develop a Storm Water Pollution Prevention Plan that emphasizes "source area" controls, which are designed to prevent storm water from becoming contaminated;
- 3 Implement the Storm Water Pollution Prevention Plan and conduct visual site inspections to assure that the plan is working;
- 4 Visually monitor storm water outfalls for the presence of contaminants during rainfall or runoff events;
- 5 Keep progress and monitoring results current and available for inspection by DNR.

Several technical support documents are available to assist industries:

The DNR has developed a document for industries entitled Industrial Storm Water Pollution Prevention Planning, dated September 1994. This document provides industries with guidance in preparing the required pollution prevention plans, and will be made available to industries receiving this permit. This document (Document Sales stock #1723) is available online at <http://dnr.wi.gov/org/water/wm/nps/stormwater/industrialforms.htm#swppp>

The USEPA has developed a document for industries entitled Storm Water Pollution Prevention for Industrial Activities (EPA-832-R-92-006). This document includes guidance on selecting best management practices for controlling storm water pollutants from selected sites, and supplements other similar documents. It is available for a fee from the National Technical Information Service (703-487-4650) or the U.S. Government Printing Office (202-783-3238).

The DNR has developed a document for industries entitled Wisconsin's Guidance for Industrial Storm Water Sampling, dated September 1994. This document provides industries with guidance in sample collection, preservation, and other aspects important to preparing for sampling, and will be made available to industries receiving this permit. This document (Document Sales stock #1724) is available through the Wisconsin Department of Administration, Document Sales, 202 S. Thornton Ave., P.O. Box 7840 Madison, WI 53707-3358. To order by credit card, call 1-800-362-7253.

The DNR has developed technical standards for erosion control and storm water management at construction sites and for post-construction runoff management. The standards are available at <http://dnr.wi.gov/org/water/wm/nps/stormwater/techstds.htm>

The University of Wisconsin – Wisconsin Storm Water Manual. Originally published in 1994, this technical manual was developed to aid local units of government, developers, contractors, and consulting engineers in controlling storm water pollutants from existing and new developments. Part One is an overview with chapters on Storm Water Planning, Storm Water Legal Issues, Pollution Prevention and Best Management Practices. The second part of the manual, published in early 2000, is an elaboration of technical design guidelines for storm water management practices including sections on hydrology, infiltration basins and trenches, wet detention basins, artificial wetland storm water management systems, filter strips and grassed waterways.

Individual modules are available for download at: <http://cecommerce.uwex.edu/showcat.asp?id=111>

Or order from:

Publication DOA #1720, DNR WR-349

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Summary of the Tier 2 General Permit for Industrial Storm Water Discharges

Changes from Previous Reissuance of this Permit

1. The applicability of this permit in Part II.D. was changed as follows:
 - After September 30, 2001, this permit may not authorize the initial discharge of storm water within Indian Country.
 - Storm water discharges must be in conformance with wetland water quality standards within ch. NR 103, Wis. Adm. Code.
 - Storm water discharges must be in conformance with the endangered and threatened resource protection requirements of s. 29.604, Wis. Stats. and ch. NR 27, Wis. Adm. Code.
 - Storm water discharges that may affect any historic property will need to comply with the historic property requirements pursuant to s. 44.40 (3), Wis. Stats.
2. The Storm Water Pollution Prevention Plan (SWPPP) and SWPPP summary reporting requirement were changed within Part V.A.(1). The Department may specify a Start Date for existing facilities found operating without a permit that will achieve compliance in the shortest practical time. Thus, facilities operating in non-compliance may be given less than 12 months to develop a SWPPP and send a copy of the SWPPP summary to the Department.

Part I. Application Requirements

This part of the permit reiterates the requirements of s. NR 216.26, Wis. Adm. Code. It directs industrial facilities identified in the code to apply for a storm water discharge permit; states that the Department will evaluate the information submitted in the application to determine eligibility for Tier 2 coverage; and, if appropriate, transmit a copy of the Tier 2 permit to the facility with a cover letter, indicating the effective date of coverage.

Part II. Storm Water Discharges Associated with Industrial Activity Eligible for Coverage by This Permit

A. **Applicability.** Facilities eligible for coverage under this permit include those specified in s. NR 216.21 (2)(b), Wis. Adm. Code. In summary, this includes the following facilities: "light" manufacturing facilities by their SIC code; transportation facilities such as railroads, airports, and local and interurban passenger transit; mining, oil and gas operations; facilities subject to federal storm water effluent limitation guidelines, new or existing source performance standards, or toxic pollutant effluent standards; treatment works for domestic or other types of sewage; landfills; hazardous waste facilities; manufacturers of asphalt paving mixes and block, and cement products; and steam electric generators. In addition, the coverage is provided under this permit for facilities which DNR has determined are more appropriately covered by a Tier 2 general permit in accordance with s. NR 216.23(9), Wis. Adm. Code. Industrial facilities described in section A.(1) are only eligible for coverage under this general permit if they are discharging storm water that has come into contact with material handling equipment or activities, raw materials, intermediate or final products, waste materials, byproducts, or industrial machinery in the source areas listed in Part III.B.(2)(d), excluding access roads and rail lines.

B. Authorized Discharges. Non-storm water discharges to storm sewer systems can result in significant contamination of surface or groundwaters. This general storm water permit only authorizes the discharge of storm water associated with industrial activity. It does not authorize the discharge of other wastewaters, such as cooling water, non-contact cooling water, other process wastewater, domestic sewage, spills, or leaks. Some of these discharges (such as process wastewaters and cooling waters) can be authorized through another general or individual WPDES permit. These other permits will specify different conditions appropriate for the discharge so that surface and groundwater quality is protected. The Department of Natural Resources, Bureau of Watershed Management, Permits and Pretreatment Section should be contacted if these discharges occur to determine what type of permit coverage is needed. This storm water permit does allow the commingling of non-storm water with storm water in a storm water outfall provided the non-storm water component is regulated under another permit. Under normal circumstances, there are no permits available for some types of non-storm discharges to the storm sewer system, such as the discharge of sanitary sewage (except in combined sewer areas), spills, and leaks. These types of discharges are generally illegal.

C. Movement to Tier 1 Coverage. This section gives the Department the authority to move a facility presently covered under a Tier 2 permit into a Tier 1 permit, in cases where contamination of storm water is a significant problem.

D. Exclusions. Storm water discharges are not eligible for coverage under this permit unless they meet the conditions within this section.

This permit requires storm water discharges to meet the wetland standards of ch. NR 103, Wis. Adm. Code, the endangered and threatened resources protection requirements of s. 29.604, Wis. Stats. and ch. NR 27, Wis. Adm. Code, and that storm water discharges will not adversely effect any historic property pursuant to s. 44.40 (3), Wis. Stats. These conditions were added to the permit based on required state laws that came into effect since the permit was previously issued.

This permit may not be used to provide initial permit coverage to a storm water discharge within Indian Country after September 30, 2001. An individual permit will be required for initial permit coverage after September 30, 2001. Facilities already covered under this permit are allowed to continue with coverage under the reissued permit. This change was made due to an agreement made between the State of Wisconsin and the Oneida Indian Tribe in May 1998.

This section states that areas such as office buildings and associated parking lots are not considered an industrial activity and, hence, are not covered under the storm water general permit provided the storm water discharged from these areas is kept separate from the storm water discharged from industrial activities. It should be pointed out that a facility's non-industrial areas receiving significant atmospheric deposition of contaminants from the facility's operation will be covered under the storm water permit.

This section also allows the Department to make the determination that a facility is more appropriately regulated by an individual WPDES permit rather than a general storm water permit, and specifies the criteria for making this determination.

Lastly, this section excludes discharges regulated by other permits containing storm water effluent limitations. There is a difference between a discharge and a facility. It is possible for a facility to be eligible for coverage under a general storm water permit, while at the same time be required to hold an individual WPDES permit having a numerical limitation of a pollutant in a storm water discharge. A case in point is a coal-fired power plant. By Wisconsin and federal law, this facility is required to have an individual WPDES permit; and the runoff from the coal pile is subject to a maximum suspended solids concentration of 50 mg/L. Since the power plant has other "source areas" for contamination of storm water, it may also be covered under a general storm water permit exclusive of the coal pile.

Part III. Storm Water Pollution Prevention Plans

A. Plan Required. Development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) is the cornerstone of the federal and state storm water management program, and is a federally required component of all state storm water permits, as well as a requirement of all Tier 2 permittees under ch. NR 216, Wis. Adm. Code. The planning requirements identified by USEPA and included into ch. NR 216, Wis. Adm. Code, are considered to be BAT/BCT for storm water.

B. Required Content. This permit incorporates all of the major components required under s. NR 216.27, Wis. Adm. Code, for a Storm Water Pollution Prevention Plan (SWPPP). This permit incorporates numerous detailed requirements in order to assure greater consistency and quality of these plans. DNR and USEPA have developed guidance documents for use by industry in preparing these plans. These documents are listed previously in this fact sheet.

Several sections in Part III.B.(2) of the permit contain qualitative clauses that serve to "trigger" specific action by the permittee. Under paragraph (g), for example, consideration is to be given to the "significance" of the concentrations for several conventional pollutants when developing the facility monitoring plan. As another example, under paragraph (h) storm water treatment practices must be provided when source area type controls are infeasible or "inadequate" in controlling storm water pollutants. Furthermore, if storm water is contaminated by "significant" amounts of petroleum product or eroded sediment, then paragraphs (h) (1-2) require that specific structural treatment type practices be used. These "triggers" are purposefully left vague because the DNR does not feel that it has sufficient information to set numeric criteria in these areas. These clauses express an intent, and should be useful "triggers" for protective action in situations where serious pollution is occurring.

Under Part III.C., permittees who already have plans under a separate program that will effectively prevent the pollution of storm water can include these plans into their SWPPP by reference. Through this permit clause, DNR hopes to protect permittees from having to generate new, redundant plans.

Part III.D. of the permit covers SWPPP amendment procedures. The permittee may need to make amendments after the plan has been implemented. The need for additional control may become apparent through the annual site inspection, monthly visual checks, or annual chemical monitoring. In other cases, amendments may result from planned changes at the facility that create new or increased sources of storm water contamination. Examples of this might include surface regrading that changes drainage patterns, or expansion/changes in facility operations that create new impervious areas or possibly bring new contaminants into contact with storm water. The facility has the obligation to initiate plan amendments whenever these changes at the facility increase storm water pollutant loadings to either receiving waters or to storm water treatment devices. DNR may also initiate the amendment process by notifying the facility that an amendment is required when DNR determines the existing plan is ineffective.

Several paragraphs in Part III.D. of the permit also contain qualitative clauses that serve to "trigger" specific action by the permittee. For example, paragraph (1) requires that the SWPPP be amended if "significant" increases occur in the exposure of pollutants to storm water. A similar qualifier appears in paragraph (2) with respect to the "effectiveness" of storm water controls. DNR is not in a position to establish numeric criteria at this point. DNR intends to work with industry to establish a common ground for interpreting these phrases in the permit and through experience hopes to be able to establish firmer criteria in the future.

Part IV. Monitoring Requirements

A. Purpose. This section reflects the requirements and conditions for both non-storm and storm water discharge monitoring under s. NR 216.28, Wis. Adm. Code. Testing for non-storm discharges to the storm sewer system is a federally required component of the permit. States were given authority under 40 CFR 122.44 to establish their own monitoring requirements for storm water discharges, provided that minimum standards were met. These federal monitoring requirements were established in s. NR 216.28, Wis. Adm. Code, to more effectively assess the permittee's SWPPPs and to identify additional management practice needs.

B. Evaluation of Non-Storm Discharges. The SWPPP must certify that the storm water discharge has been tested or evaluated for the presence of non-storm water discharges. This may be done with a one-time evaluation using such techniques as dye testing, smoke testing, or video camera observation. Alternatively, a periodic (twice per year) visual inspection during dry-weather flow periods can be used as a testing method. In the event that a non-storm water discharge is detected, the permittee must assess the source of the discharge. Many types of non-storm water discharges will need coverage under some type of a WPDES permit, so it is important that the permittee obtain the additional coverage or eliminate the discharge. This section of the permit includes requirements and conditions on evaluating these discharges. A "failure to certify" option is allowed under s. NR 216.28(1)(d), Wis. Adm. Code, where a permittee states access to a suitable monitoring site is not available.

C. Storm Water Discharges. This permit requires each permittee to conduct and report on two levels of storm water discharge monitoring activity. The monitoring strategy will be set forth by the permittee in section (i) of the SWPPP. The purpose of all monitoring is to evaluate the effectiveness of "source area" controls.

The first level of storm water monitoring (Part IV.C.(1)) consists of a comprehensive annual facility site compliance inspection to determine if the facility is operating in compliance with its SWPPP. The permittee should use the results of this inspection to determine the extent to which the facility's SWPPP needs to be updated to prevent pollution from new source areas, as well as to correct any inadequacies that the plan may have in handling existing sources.

The second level of storm water monitoring (Part IV.C.(2)) consists of quarterly visual observations of storm water leaving the site during runoff events caused by snowmelt or rainfall. This is a practical, low cost tool for identifying obvious contamination of storm water discharges, and can also help identify which practices are ineffective. This period will depict the worst case situation, which is appropriate for spotting problem areas. The goal of quarterly inspections is to obtain results from a set of four inspections that are distributed as evenly as possible throughout the year and which depict runoff quality during each of the four seasons.

Under s. NR 216.28(5), Wis. Adm. Code, DNR may waive specific monitoring requirements for just cause, as provided in Part IV.C.(3) of the permit. For example, the two-level approach may need to be modified to adapt to certain situations, such as seasonal or temporary operations. In addition, DNR may grant other waivers. For example, in the unlikely event that during a prolonged dry period the only events that produce runoff will occur during times when staff are not present at the facility or when it is dangerous to attempt to perform the required monitoring. Should this occur, DNR may waive the submittal of inspection data for the affected quarter. This waiver will not be available for permittees that fail to conduct the required inspections/monitoring when conditions are appropriate.

DNR may waive specific monitoring requirements for inactive or remote facilities where the typical level of monitoring effort specified by this permit is not warranted or is impractical. However, a facility check must be made at least once in 3 years at such facilities.

Part V. Compliance & Reporting

This permit has a "rolling" compliance schedule for each permittee. The schedule starts when the permittee receives the permit from DNR, referred to as the permit "effective date." Consequently, all permittees have the same number of days in which to complete specified activities regardless of when the permit becomes effective at the facility. The permit differentiates between new and existing facilities only in the timeframe by which they must create their SWPPP. Existing facilities will need to complete a SWPPP and submit a summary of the plan to DNR within 12 months of their permit effective date. Newly constructed facilities must prepare a SWPPP and submit the summary prior to initiating construction.

Part V.A. of the permit specifies that each existing facility has 24 months from the effective date of permit coverage to implement their BMPs, while a facility constructed after October 31, 1994 has 12 months. Under s. NR 216.29(5), Wis. Adm. Code, the permittee is allowed to create an alternative implementation schedule for their plan. However, DNR still maintains the authority to determine whether the alternate timeframe will be acceptable. In addition, DNR may, if warranted, perform reviews of detailed plans and specifications for storm water treatment practices, such as oil/water separators, sedimentation or filtration devices, infiltration

devices, or chemical treatment devices. It is hoped that facilities will initially depend upon "source area control" practices that prevent storm water from becoming contaminated in the first place before relying on storm water treatment type mechanisms.

The permit requires the first AFSCI to be conducted within 24 months from the effective date of permit coverage. The permittee is required to create an AFSCI report, which is to be kept on site. Subsequent AFSCIs also require reports, which are to be kept on site.

Part VI. General Permit Conditions

This section includes requirements to comply with this general permit and the applicable State laws and regulations.

A. NR 205. These are general permit conditions in s. NR 205.07(1), Wis. Adm. Code are required in all WPDES permits.

B. Work near Surface Waters and Wetlands. Other permits or approvals may be required of the permittee. The permittee is responsible for obtaining the necessary approvals.

C. Duty to Comply. Any act of noncompliance with this permit is a violation of the permit and is grounds for enforcement action, for permit termination or modification, or denial of coverage under the permit. If the permittee files a request for an individual WPDES permit or a notification of planned changes or anticipated noncompliance, this action by itself does not relieve the permittee of any permit condition.

D. Continuation of Expired General Permit. This permit condition assures continued coverage for a discharger under a WPDES permit in the event that DNR is late in replacing this permit with a new issue.

E. Duty to Halt or Reduce Activity. In the event of a management practice failure, this condition requires the permittee to modify or curtail other operations until best management practices are restored or an alternative practice is put in place.

F. Duty to Provide Information. This condition requires the permittee to promptly notify the DNR when he or she becomes aware of a failure to submit any relevant facts or a submittal of incorrect information.

G. Records Retention. The permittee shall retain all reports and records for a period of 5 years beyond the effective date of permit coverage.

H. Notice of Termination. Facilities that cease discharging storm water associated with industrial activity must request that DNR terminate the facility's coverage under the general permit. This procedure applies to facilities that cease operations as well as to facilities that stay in place and continue operations, but no longer discharge storm water contaminated by industrial activity. This could come about, for example, if a facility changes its business to a type that is no longer covered by this permit. In such cases, the permit serves no further purpose and can be terminated.

The DNR will not continue to apply the general permit in the case of facility closure and abandonment, provided that the site is left clean of pollutant residuals that could contaminate storm water.

I-X. Miscellaneous Conditions. These conditions are authorized or required by existing state law.

Further information on this permit is available online at <http://dnr.wi.gov/org/water/wm/nps/stormwater.htm> or contact the appropriate regional Department office or write to:

Wisconsin Department of Natural Resources
Storm Water Program - WT/2
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